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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/131,744	08/10/1998	NORIBUMI KOTABASHI	884.2742	8265

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EXAMINER

SCHWARTZ, PAMELA R

ART UNIT PAPER NUMBER

1774

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/131,744

Applicant(s)

KOITABASHI ET AL.

Examiner

Pamela R. Schwartz

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. Indication of allowable subject matter is withdrawn in view of the rejections which follow. However, claim 3 is still considered to contain allowable subject matter.
2. Patent No. 6,612,691 has been cited on a USPTO-892 because this application was cited by applicants but included an error in the application number.
3. The restriction requirement is withdrawn with respect to all claims except for claim 10 which is directed to an apparatus. Therefore, claims 1-9 and 11-16 will be considered herein.
4. Claim 16 includes a typographical error in the last line. The word "agent" should be added after "active".
5. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 7 does not properly further limit the claim from which it depends. Claim 1 recites "an ink" and that the processing liquid "is applied onto the recording material...after penetration of the ink into the medium." Claim 7 says the "the ink includes" two inks and that one of these inks is ejected onto the processing liquid. This appears inconsistent with claim 1. If the ink of claim 1 comprises two inks, they would both have to be applied together. Applicants may be able to overcome this rejection by stating that the method further comprises application of a second ink (which is not part of the "ink" of claim 1). Correction or clarification is requested.

7. It is noted that the term "processing liquid" does not appear to be defined within the specification. Without definition, the term is considered broad enough to include inks.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claim 2 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,612,691. Although the conflicting claims are not identical, they are not patentably distinct from each other because the totality of the patent claims disclose the subject matter of claim 2. In claim 1, a method including ejecting both black ink and color ink onto a recording medium and wherein each ink has an absorption coefficient K_a of 1 to 5 and satisfies $0 < t_s \leq 200$ msec. There is a heating step during this process. Claim 7 of the patent recites an approximately one second time difference in time between application of ink droplets onto the same pixel. Claim 9 states that the heating step occurs "before elapse of t_s after deposition of the black ink." Based upon the relationship of the times in these claims, heat will be applied prior to the color ink.

9. Claims 1, 4-6, 9, 11-13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike et al. (5,608,438) for reasons of record in Paper No. 26 and for reasons given below. Pigments are conventional additives to ink jet recording inks.

Although the reference discloses the use of dyes as their primary colorants, use of conventional ink additives would have been obvious to one of ordinary skill in the art.

Finally, it would have been obvious to one of ordinary skill in the art to determine effective quantities of surface active agents in the media because they directly impact the absorption coefficient and surface tension of the ink and are conventional additives with well known properties.

10. Claims 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koike et al. (5,608,438) for reasons of record in Paper No. 26 and for reasons given below, and further in view of Yamamoto et al. (EP 588,241). The secondary reference teaches a similar method which relies upon differences in surface tension of inks. The reference teaches that feathering is decreased when the first and second inks include colorants of opposite polarity (see page 4, lines 26-32) based upon this teaching, it would have been obvious to use inks of different polarity in the practice of Koike et al. in order to prevent image feathering.

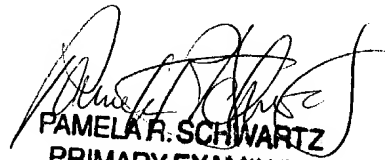
11. The arguments of Paper No. 27, but they are not persuasive for the reasons set forth above or are moot in view of the modified grounds of rejection.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRSchwartz
July 30, 2004



PAMELA R. SCHWARTZ
PRIMARY EXAMINER